

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A master communication device requested for authentication for connection from at least one slave ~~another~~ communication device, the master communication device comprising:

a receiving section for receiving, from a slave communication device among any one of the at least one slave ~~another~~ communication device, an authentication request including device information by which the slave ~~another~~ communication device is capable of being determined to be a source, and for monitoring and determining whether or not the authentication request is changed by an unspecified third party while being transmitted;

a display section for, when it is determined that the authentication request is not changed, displaying the device information included in the authentication request on a screen thereof;

an input section for receiving, from a user, an input of a determination confirmation ~~result of the displayed device information from a user obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed;~~

a transmission section for transmitting an authentication response including information indicative of verification or non-verification of the authentication with the slave ~~another~~ communication device in accordance with the determination result input to the input section; and

an authentication section for, when the information included in the authentication response is indicative of verification of the authentication, performing key exchange with the

slave ~~another~~ communication device using the device information included in the authentication request and the information included in the authentication response.

2. (Currently Amended) A slave communication device requesting a master ~~another~~ communication device for authentication for connection, the slave communication device comprising:

a transmission section for transmitting an authentication request including device information indicative of the slave communication device to the master ~~another~~ communication device;

a receiving section for receiving, from the master ~~another~~ communication device, an authentication response corresponding to the authentication request and including device information by which the master ~~another~~ communication device is capable of being determined to be a source, and for monitoring and determining whether or not the authentication response is changed by an unspecified third party while being transmitted;

a display section for, when it is determined that the authentication response is not changed, displaying the device information included in the authentication response on a screen thereof;

an input section for receiving, from a user, an input of a determination confirmation ~~result~~ of the displayed device information from a user obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined

not to be changed; and

an authentication section for executing processing of verifying or not verifying the authentication with the master ~~another~~ communication device in accordance with the determination result input to the input section, and for, when the determination result is indicative of verification of the authentication, further performing key exchange with the master ~~another~~ communication device using the device information included in the authentication request and the authentication response.

3-10. (Canceled)

11. (Currently Amended) A communication system for executing authentication processing for connecting a first-slave communication device to a ~~second-~~master communication device, wherein:

the ~~first-slave~~ communication device includes:

a transmission section for transmitting an authentication request including device information by which the first-slave communication device is capable of being determined to be a source to the ~~second-~~master communication device;

a receiving section for receiving, from the ~~second-~~master communication device, an authentication response corresponding to the authentication request and including device information indicative of verification or non-verification of the authentication with the first-slave communication device, and for monitoring and determining whether or not the authentication

response is changed by an unspecified third party while being transmitted; and

an authentication section for, when it is determined that the authentication response is not changed, executing processing of verifying or not verifying the authentication with the ~~second-master~~ communication device in accordance with the authentication response, and for, when the device information included in the authentication response is indicative of verification of the authentication, further performing key exchange with the ~~second-master~~ communication device using the device information included in the authentication request and the authentication response; and

the ~~second-master~~ communication device includes:

a receiving section for receiving the authentication request from the ~~first-slave~~ communication device, and for monitoring and determining whether or not the authentication request is changed by an unspecified third party while being transmitted;

a display section for, when it is determined that the authentication request is not changed, displaying the device information included in the authentication request on a screen thereof;

an input section for receiving, from a user, an input of a ~~confirmation-~~
~~determination~~ result of the displayed device information from a user obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed;

a transmission section for transmitting the authentication response in accordance

with the determination result input to the input section; and

an authentication section for, when the device information included in the authentication response is indicative of verification of the authentication, performing key exchange with the first-slave communication device using the device information included in the authentication request and the authentication response.

12. (Currently Amended) A communication system for executing authentication processing for connecting a first-slave communication device to a second-master communication device, wherein:

the first-slave communication device includes:

a transmission section for transmitting an authentication request including device information indicative of the first-slave communication device to the second-master communication device;

a receiving section for receiving, from the second-master communication device, an authentication response corresponding to the authentication request and including device information by which the second-master communication device is capable of being determined to be a source, and for monitoring and determining whether or not the authentication response is changed by an unspecified third party while being transmitted;

a display section for, when it is determined that the authentication response is not changed, displaying the device information included in the authentication response on a screen thereof;

an input section for receiving, ~~from a user~~, an input of a ~~confirmation-~~
~~determination~~ result of the ~~displayed device information from a user obtained based on the~~
~~displayed device information~~, by allowing the user to determine whether or not to verify the
~~authentication with the master communication device which is a source of the authentication~~
~~response determined not to be changed~~; and

an authentication section for executing processing of verifying or not verifying the
authentication with the ~~second-master~~ communication device in accordance with the
~~determination~~ result input to the input section, and for, when the ~~determination~~ result is
indicative of verification of the authentication, further performing key exchange with the ~~second-~~
~~master~~ communication device using the device information included in the authentication request
and the authentication response; and

the ~~second-master~~ communication device includes:

a receiving section for receiving the authentication request from the ~~first-slave~~
communication device, and monitoring and determining whether or not the authentication
request is changed by an unspecified third party while being transmitted;

a transmission section for transmitting the authentication response corresponding
to the authentication request to the ~~first-slave~~ communication device; and

an authentication section for, when the authentication is verified by the ~~first-slave~~
communication device, performing key exchange with the ~~first-slave~~ communication device
using the device information included in the authentication request and the authentication
response.

13. (Currently Amended) An authentication method for executing authentication processing for connecting a first-slave communication device to a second-master communication device, the authentication method comprising the steps of:

the first-slave communication device transmitting an authentication request including device information by which the first-slave communication device is capable of being determined to be a source to the second-master communication device;

the second-master communication device receiving the authentication request from the first-slave communication device, and monitoring and determining whether or not the authentication request is changed by an unspecified third party while being transmitted;

the second-master communication device displaying the device information included in the authentication request on a screen thereof when it is determined that the authentication request is not changed;

the second-master communication device receiving, from a user, an input of a confirmation-determination result of the displayed device information from a user obtained based on the displayed information, by allowing the user to determine whether or not to verify the authentication with the slave communication device which is a source of the authentication request determined not to be changed;

the second-master communication device transmitting an authentication response including information indicative of verification or non-verification of the authentication with the first-slave communication device in accordance with the input determination result;

the first-slave communication device receiving the authentication response corresponding

to the authentication request from the ~~second-master~~ communication device, and monitoring and determining whether or not the authentication response is changed by an unspecified third party while being transmitted;

the ~~first-slave~~ communication device executing processing of verifying or not verifying the authentication with the ~~second-master~~ communication device in accordance with the authentication response when it is determined that the authentication response is not changed; and

the ~~first-slave~~ communication device and the ~~second-master~~ communication device performing key exchange with each other using the device information included in the authentication request and the information included in the authentication response when the information included in the authentication response is indicative of verification of the authentication.

14. (Currently Amended) An authentication method for executing authentication processing for connecting a ~~first-slave~~ communication device to a ~~second-master~~ communication device, the authentication method comprising the steps of:

the ~~first-slave~~ communication device transmitting an authentication request including device information indicative of the ~~first-slave~~ communication device to the ~~second-master~~ communication device;

the ~~second-master~~ communication device receiving the authentication request from the ~~first-slave~~ communication device, and monitoring and determining whether or not the

authentication request is changed by an unspecified third party while being transmitted;

the ~~second-master~~ communication device transmitting an authentication response corresponding to the authentication request and including device information by which the ~~second-master~~ communication device is capable of being determined to be a source to the ~~first-slave~~ communication device;

the ~~first-slave~~ communication device receiving the authentication response corresponding to the authentication request from the ~~second-master~~ communication device, and monitoring and determining whether or not the authentication response is changed by an unspecified third party while being transmitted;

the ~~first-slave~~ communication device displaying the device information included in the authentication response on a screen thereof when it is determined that the authentication response is not changed;

the ~~first-slave~~ communication device receiving, from a user, an input of a ~~confirmation-determination~~ result ~~of the displayed device information from a user obtained based on the displayed device information, by allowing the user to determine whether or not to verify the authentication with the master communication device which is a source of the authentication response determined not to be changed;~~

the ~~first-slave~~ communication device executing processing of verifying or not verifying the authentication with the ~~second-master~~ communication device in accordance with the input ~~determination~~ result; and

the ~~first-slave~~ communication device and the ~~second-master~~ communication device

performing key exchange with each other using the device information included in the authentication request and the authentication response when the determination result is indicative of verification of the authentication.

15. (Previously Presented) The communication device according to claim 1, wherein the display section further displays channel information used for reception of the authentication request, in addition to the device information included in the authentication request, thereby making it possible for the user to determine whether or not the authentication request is transferred using another channel by the unspecified third party.

16. (Previously Presented) The communication device according to claim 2, wherein the display section further displays channel information used for reception of the authentication response, in addition to the device information included in the authentication response, thereby making it possible for the user to determine whether or not the authentication response is transferred using another channel by the unspecified third party.

17. (Previously Presented) The communication device according to claim 1, wherein the user is able to determine, based on whether or not the authentication request is received a plurality of times and whether or not a public key and a signature in the device information included in the authentication request are changed, whether or not the received authentication request is changed by the unspecified third party.

18. (Previously Presented) The communication device according to claim 2, wherein the user is able to determine, based on whether or not the authentication response is received a plurality of times and whether or not a public key and a signature in the device information included in the authentication response are changed, whether or not the received authentication response is changed by the unspecified third party.

19. (Previously Presented) The communication system according to claim 11, wherein the display section further displays channel information used for reception of the authentication request, in addition to the device information included in the authentication request, thereby making it possible for the user to determine whether or not the authentication request is transferred using another channel by the unspecified third party.

20. (Previously Presented) The communication system according to claim 12, wherein the display section further displays channel information used for reception of the authentication response, in addition to the device information included in the authentication response, thereby making it possible for the user to determine whether or not the authentication response is transferred using another channel by the unspecified third party.

21. (Previously Presented) The communication system according to claim 11, wherein the user is able to determine, based on whether or not the authentication request is received a plurality of times and whether or not a public key and a signature in the device information

included in the authentication request are changed, whether or not the received authentication request is changed by the unspecified third party.

22. (Previously Presented) The communication system according to claim 12, wherein the user is able to determine, based on whether or not the authentication response is received a plurality of times and whether or not a public key and a signature in the device information included in the authentication response are changed, whether or not the received authentication response is changed by the unspecified third party.

23. (Previously Presented) The authentication method according to claim 13, wherein the step of displaying the device information included in the authentication request further includes displaying channel information used for reception of the authentication request, thereby making it possible for the user to determine whether or not the authentication request is transferred using another channel by the unspecified third party.

24. (Previously Presented) The authentication method according to claim 14, wherein the step of displaying the device information included in the authentication response further includes displaying channel information used for reception of the authentication response, thereby making it possible for the user to determine whether or not the authentication response is transferred using another channel by the unspecified third party.

25. (Previously Presented) The authentication method according to claim 13, wherein the step of monitoring and determining whether or not the received authentication request is transmitted by the unspecified third party includes enabling the user to determine, based on whether or not the authentication request is received a plurality of times and whether or not a public key and a signature in the device information included in the authentication request are changed, whether or not the received authentication response is changed by the unspecified third party.

26. (Previously Presented) The authentication method according to claim 14, wherein the step of monitoring and determining whether or not the received authentication response is transmitted by the unspecified third party includes enabling the user to determine, based on whether or not the authentication response is received a plurality of times and whether or not a public key and a signature in the device information included in the authentication response are changed, whether or not the received authentication response is changed by the unspecified third party.